GEOGRAPHIC NEWS BULLETINS

Published Weekly by

THE NATIONAL GEOGRAPHIC SOCIETY

(The National Geographic Society is a scientific and educational Society, wholly altruistic, incorporated under the Federal law as a non-commercial institution for the increase of geographic knowledge and its popular diffusion.)

General Headquarters, Washington, D. C.

Contents for Week of January 10, 1927. Vol. V, No. 24

1. Salina Cruz: South America Flyers' First Stop on the Pacific.
2. How the Salt Shaker Found Its Way to the Dining Table.
3. The Windward Islands Protest Being Left by the Wayside.
4. American Funds May Reconstruct Brest-Litovsk, Poland.
5. The Bonin Islands, Which Are Near the Deepest Place in the Ocean.

© *National Geographic Society*

WEIGHING SALT AS IT COMES IN CAKES FROM EVAPORATION VATS: CHINA

(See Bulletin No. 2)

HOW TEACHERS MAY OBTAIN THE BULLETINS

The Geographic News Bulletins are published weekly throughout the school year (thirty issues) and will be mailed to teachers for one year upon receipt of 25 cents (in stamps or money order). Entered as second-class matter, January 27, 1922, at the Post Office at Washington, D. C., under the Act of March 3, 1879. Acceptance for mailing at special rate of postage provided for in section 1103, Act of October 3, 1917, authorized February 9, 1922.

GEOGRAPHIC NEWS BULLETIN

Published Weekly by

THE NATIONAL GEOGRAPHIC SOCIETY

(Founded in 1888 for the Increase and Diffusion of Geographic Knowledge)

General Headquarters, Washington, D. C.

Salina Cruz: South America Flyers' First Stop on the Pacific

IN FLYING to Salina Cruz, Mexico, the Army flyers on their way to circle South America cross the great divide. After Vera Cruz, the flyers' route calls for a stop at Puerto, Mexico, and then a sharp turn to the west over the mountains to Salina Cruz, port on the Pacific.

Salina Cruz is Mexico's Panama City. This west coast Mexican port is an example of how an important happening in world economics can wreck the prosperity of a remote community, and how Nature—aided by man's neglect—can overcome in a few years the millions spent on great engineering projects.

Salina Cruz looks important on a map at the Pacific end of Mexico's 100-mile ocean-to-ocean railway across the Isthmus of Tehuantepec. A great British engineering firm spent $40,000,000 constructing there some of the world's best port facilities. But there is an economic question mark that doesn't show up in the picture. It is the Panama Canal, 1,000 miles to the southeast. Its completion burst Salina Cruz's bubble of prosperity.

A Busy Port Becomes a Sleepy Village Again

The port works at Salina Cruz were completed in 1908 and immediately a big business sprang into existence. Thousands of tons of Hawaiian sugar, which formerly had made the slow voyage of many days around South America, poured into Salina Cruz to be whisked across to the Atlantic in a day. Numerous big ships came, too, with many commodities. The wharves were piled with boxes and bales; batteries of electric cranes bent over and rose up like members of a physical culture class; switch engines snorted; and train after train pulled out for the short trip to the Atlantic. At one time freight trains moved in each direction daily on such close schedules that the locomotives almost bumped into cabooses of the trains ahead.

Almost simultaneously came the World War and the opening of the Panama Canal. Salina Cruz became a sleepy little seaside village with the unused equipment of a city. Only a few small ships came in; the cranes stopped their tireless bobbing and became gaunt, dead machines, their arms fixed like abandoned semaphores. Railway equipment rusted on sidings; people drifted away. The population dropped from 10,000 to barely 3,000.

Salina Cruz Was Made to Order

Engineers had known from the first that sand brought in by the coastal current was Salina Cruz's great enemy. Continuous dredging was the price that must be paid for a port that could accommodate deep-draft freighters. After the great slump in traffic, little dredging was done and sand soon blocked the harbor entrance to all but small boats. While Salina Cruz can never rival Panama, there is an excellent opportunity for building up a business in goods requiring such quick transit that the elimination of the extra mileage by way of Panama is worth while. There is also possible, in the future, the development of a considerable business in the exchange of goods between the two Mexican coasts.

Salina Cruz was a made-to-order town and as a consequence is healthier than most tropical ports. When the port site was selected a small village existed on a little lagoon. It was a deadly fever hole and was completely wiped out. The

© National Geographic Society

BUNDLES OF WHALEBONE RECEIVED AT THE FACTORY

The world's demand for whalebone was one of the reasons for settlement of the Bonin Islands. Although these islands now belong to Japan they were settled by people coming from Hawaii. These earlier settlers supplied the wants of American whalers cruising in this part of the Pacific (see Bulletin No. 5).

GEOGRAPHIC NEWS BULLETIN

Published Weekly by

THE NATIONAL GEOGRAPHIC SOCIETY

(Founded in 1888 for the Increase and Diffusion of Geographic Knowledge)

General Headquarters, Washington, D. C.

How the Salt Shaker Found Its Way to the Dining Table

ONE OF THE first demands on Foochow, China, following its recent surrender, was an order to turn over its salt revenues. The Canton government in southern China, which has been most successful in the recent fighting, asked Foochow for the proceeds of its salt tax.

For years a part of the funds to run local and national government in China has been raised by taxes on salt. This instance is typical of the importance of this mineral to all peoples in all nations.

Salt is so cheap and plentiful in America that we lose sight of the value placed on it in primitive countries.

It is estimated that thirty thousand billion tons of salt, which would last for two million years at the present rate of consumption, are contained in a single deposit, underlying an area 650 miles long and about 200 miles wide, in portions of Kansas, Oklahoma, northwestern Texas, and New Mexico. This is by far the largest known deposit in the world. It has scarcely been touched except in Kansas, where an extensive industry has been developed.

Salt Vied with Gold as Money in Tibet

The ancient Germans believed the presence of salt in the soil gave it a peculiarly sacred character. They would wage war for salty streams.

For centuries before the Christian era blocks of salt were used by districts of China bordering the ocean to pay revenue to the Chinese rulers. In China and Tibet the mineral vied with gold as a medium of exchange.

Salt is a luxury to some of the native tribes of Central Africa, particularly to the Pygmies. Gifts of salt have made it possible for the white man to approach and study these jungle dwellers. Pygmies bury elephant tusks in the ground until they can trade them for salt and tobacco.

Some salt is produced by evaporation of sea water in localities along the seaboard and in the vicinity of salt streams and lakes. Most of our supply is extracted from deposits in the earth. Sometimes this is done by forcing water down holes reaching to the salt beds, and evaporating the brine which is forced up and withdrawn. Sometimes deposits are mined.

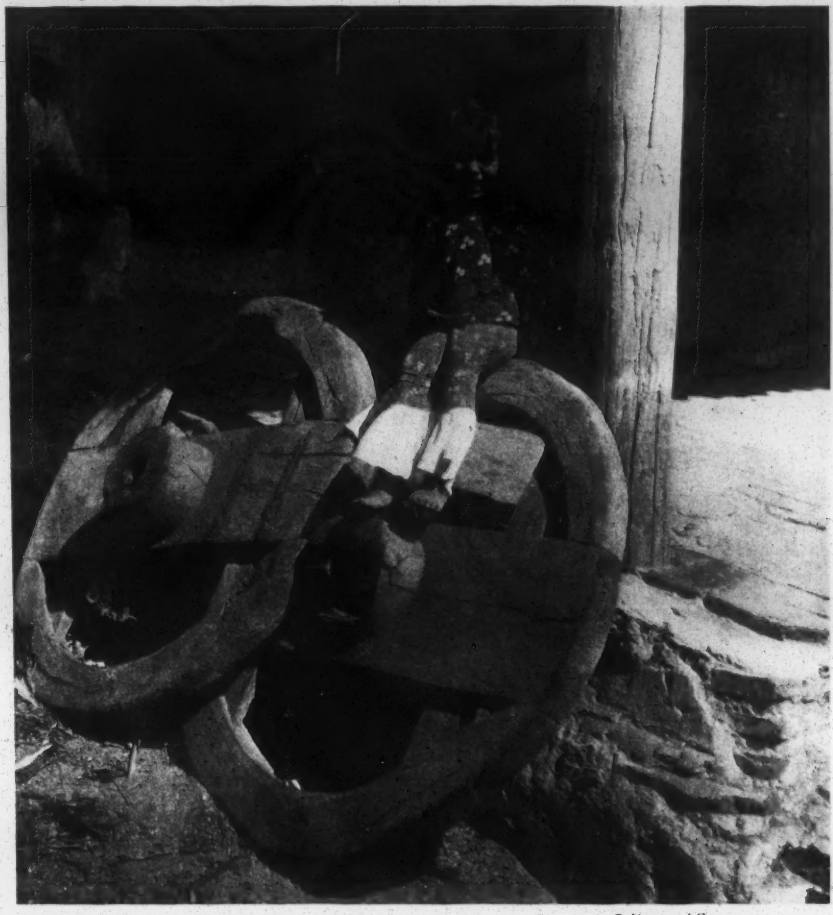
A Polish Salt Mine with Churches, Restaurants and Houses

The most famous mines are the Wieliczka mines in Galicia. Here is an underground city with 65 miles of galleries, traversed by more than 30 miles of railroads. There are monuments, houses, churches, restaurants, and railroad stations—all carved out of solid salt rock. Even the massive, artistically patterned chandeliers in numerous chapels and ballrooms are salt. There are subterranean rivers and lakes. One of the sixteen lakes is navigable. A boat is provided which visitors may hire. The mines have been in operation since the thirteenth century. They penetrate 12,000 feet into the earth.

In supplying more than seven million tons of salt produced annually in the United States, Michigan, New York, Ohio, Kansas, and Louisiana rank foremost. Michigan is slightly in the lead, with New York close on her heels. All of these States have deposits which show no indication of exhaustion. The New York deposit alone will supply the demand of this country for thousands of years,

stagnant lagoon was dredged into a harbor basin and connected with the sea. A wide, massive wharf was built across the seaward side of the basin with a ship entrance 100 feet wide. On this huge wharf six tremendous warehouses were built, each more than 400 feet long. Railways were built along the edges, and a battery of 18 large electric cranes was installed. From the ends of the wharf curving breakwaters were built out into the sea, almost enclosing an outer harbor of several hundred acres.

Just as the breakwaters enclose the harbor, Salina Cruz is itself enclosed by a semi-circular ridge of high hills. The ends of the ridge meet the sea to the east and west, forming a little basin about three-quarters of a mile wide and a little over a mile long. This basin is a barren desert, and in the middle of it, half a mile from the sea, is the town. The climate is very hot and dry, and all of the inhabitants who can do so keep themselves secluded until after sunset.



© National Geographic Society

A SHY MAID OF MEXICO'S ISTHMUS OF TEHUANTEPEC

The little girl is seated upon the immense wheels of the two-wheeled carts used for heavy hauling on the Isthmus of Tehuantepec. The oxen are yoked to these heavy vehicles by the horns.

GEOGRAPHIC NEWS BULLETIN

Published Weekly by

THE NATIONAL GEOGRAPHIC SOCIETY

(Founded in 1888 for the Increase and Diffusion of Geographic Knowledge)

General Headquarters, Washington, D. C.

The Windward Islands Protest Being Left by the Wayside

PEOPLE of the Windward Islands are alarmed at the prospect of having steamship service curtailed. They have sent a large delegation to the Colonial Secretary at London to protest. They do not wish to be cut off from the rest of the world.

To Americans the Windward Islands Colony is one of the least known of British territories in the New World. The name, "Windward Islands," means different things on different maps. To add to the confusion several other distinct names are applied to the whole and to parts of the islands that sweep in a great arc from Porto Rico to the top of South America. The entire group of little islands is known most properly, perhaps, as "the Lesser Antilles." "The Greater Antilles" consist of the larger islands, beginning with Porto Rico, that reach back toward the Gulf of Mexico.

Wrecked Slave Ships Left Their Cargo

All of the southern half of the Lesser Antilles is sometimes called "the Windward Islands." Then the term includes Martinique, St. Lucia, St. Vincent, Grenada and even Barbados, Tobago, and Trinidad. Britain's "Windward Islands Colony," however, means something definite; the three fair-sized islands, St. Lucia, St. Vincent and Grenada, and the tiny islets near Grenada known as the Grenadines.

About this little group of islands France and England fought more stubbornly than about any other bit of American territory. Over and over again they changed hands between 1650 and 1814 as the West Indian fleets of first one and then the other of the two great nations were victorious. Since the latter date all three of the islands and the Grenadines have remained British possessions.

The Windward Islands are well in the tropics. They are in the latitude of Nicaragua, the Philippines and southern India. And they are as charming examples of tropical islands as can be found in any ocean. All are mountainous, and over the sharp peaks, deep valleys and more gentle slopes of all is thrown an intensely green mantle of tropical trees, shrubs and grasses. All were peopled by the warlike Carib Indians when Columbus and other Spanish navigators discovered them. But these were largely killed off or transported during the next few centuries by British and French settlers. Most of the inhabitants of the islands today are black and are traceable to the slave ships that brought over their African cargoes during early colonial development. On St. Vincent, which was long left to the natives, several slave ships were wrecked. The survivors mingled with the Caribs so that on that island there is a more pronounced Indian strain than elsewhere.

French Desired It for a West Indian "Gibraltar"

On each of the islands is a small minority of white officials, landowners and business men. Each of the three larger islands has its own local government machinery under a British Administrator. Over all is the Governor, who resides in St. George's, chief city of Grenada. The governments are "Crown Colonies," the officials being appointed from London.

France held on longest to St. Lucia and in the enthusiastic days of Napoleon hoped to make it "the capital of the Antilles" and "the Gibraltar of the Caribbean."

although extensive operations have been carried on for a century. The deposit underlies an area of 2,000 square miles in the central part of the State and is from 3 to 318 feet thick.

Salt That Never Sees a Dining Table

Although salt is used principally for cooking and seasoning, it plays an important part in the great world industries. Large quantities are consumed in meat packing, fish curing, dairying, baking, refrigeration, pottery glazing, in the enamel and pipe works, in the silk and textile industries, in salting cattle, curing and tanning hides, making pickles, and in many other industries. In the form of brine, it is used in all chemicals containing a sodium base. These include many of the "ides," "ites," and "ates."

Every living thing would perish without salt, and a sufficient quantity is necessary to good health. Every tissue of the body has a small content of iodine, which may be supplied or renewed by the consumption of salt. Each person eats from 16 to 18 pounds of salt annually.

Bulletin No. 2, January 10, 1927.

© *National Geographic Society*

INSTRUMENTS FOR MEASURING THE TEMPERATURE AND SALINITY OF THE OCEAN

When the Coast Guard cutters take up their iceberg guard stations in the North Atlantic they make frequent tests of the ocean's salinity. The cold Labrador Current which brings down icebergs is less saline than the Gulf Stream.

GEOGRAPHIC NEWS BULLETIN

Published Weekly by

THE NATIONAL GEOGRAPHIC SOCIETY

(Founded in 1888 for the Increase and Diffusion of Geographic Knowledge)

General Headquarters, Washington, D. C.

American Funds May Reconstruct Brest-Litovsk, Poland

WATERLOO, IOWA, may come to the aid of its sister-in-name city, Waterloo, Belgium, according to reports.

Waterloo, Belgium, would thus enter the growing list of European towns which have received American aid for reconstruction; Rheims, Louvain, Cantigny, and even Brest-Litovsk.

The Polish city of Brest-Litovsk is one of the European towns to be offered American funds for restoration within the last year.

Brest-Litovsk is famous for the separate treaty which representatives of Soviet Russia and Germany signed there. Today it consists of a fine railroad station and practically nothing more. Buildings which housed 50,000 people were laid waste and the large refugee population lives principally in caves and huts.

Russian Border Fortress Before the War

Before the war Brest-Litovsk was one of Russia's most important trading centers and fortresses on her eastern borders. Complete restoration of Brest-Litovsk would mean recreating a city busy with buying, selling, carrying and transferring the products of a large agricultural region. Railways from Odessa, Kiev, Moscow, Warsaw, Vilna and East Prussia intersect at the lonesome new railroad station. But Brest-Litovsk is more than a rail center. It stands beside the inland waterway joining the Baltic Sea to the Black Sea. A canal east of the city connects the Mukhovets River and the Pripet River. These rivers are, respectively, finger tips of waterway arms reaching north from the Black Sea and South from the Baltic. Thus the city is served by a well-nigh perfect system of communication, extending in all directions.

Brest-Litovsk lies 100 miles due east of Warsaw. Normally half its population was of Jewish blood. It long has been a Jewish stronghold. The city never developed industries, but depended instead upon commerce. During the 16th century the synagogue of the city was regarded as the first in Europe.

Grains, hides, soap, wheat and timber were the staples of its extensive trade. The lumber in which Brest-Litovsk dealt was floated in great rafts down to Danzig. Flax, some of which went to Ireland and Belgium to make Irish and Flemish linen, was grown extensively in the country surrounding the town. Flax, therefore, formed another important article for its trade.

A Good Geographic Reason for the Site of the City

The familiar geographic reason gives Brest-Litovsk its site. Two rivers meet. The navigable Bug and Mukhovets rivers join and at the point of the "V" once stood the city fortress. Older fortifications covered four square miles. The defenses were the pride of Russia.

But the World War showed what history has been proving for years—that Brest-Litovsk was far from safe. The city was first mentioned in ancient documents on the occasion of its capture by a Polish monarch in 1020. Next Casmir the Just, of Poland, built a tight castle there. Princes of Galicia, Lithuania, grand masters of the Teutonic Knights, Tatar chieftains and kings of Poland, held and stormed the city in turns. Going out from it they gathered spoil from the countryside.

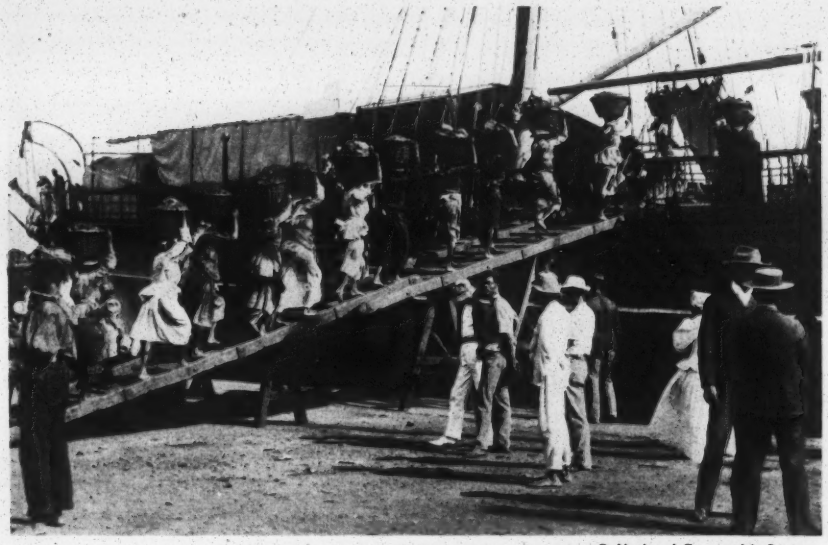
But the hope died when the treaty of 1814 gave St. Lucia to Great Britain. Now only Martinique and Guadeloupe and its islets remain of the once important French Antilles.

St. Lucia, 27 miles long by 12 wide, might be said to exist solely for its harbor, Port Castries. This superb haven, probably unsurpassed by any harbor in the Americas, was to have been France's Gibraltar. Britain has made it one of her most important naval bases and coaling stations and has heavily fortified it. A narrow bottle-neck passage of deep water leads to what is in effect a great, deep lake of salt water. Deep-draught ships of war or trade tie up directly to the piers on which lie mountains of coal. Armies of black men and women coal the ships by carrying laden baskets aboard. Most of the population of the island is concentrated in Castries, dependent on the coaling activities. A large part of the back country is abandoned to its wild state; but it is threaded with good roads that wind among its picturesque hills and tropical forests.

The Streets of Grenada Are Steps

St. Vincent, the center one of the three islands, had a terrible tragedy. Its own volcano emptied at the time that Mt. Pelee destroyed a populous city and devastated a large area of country in Martinique, in 1902. The northern third of St. Vincent was devastated. Nearly 2,000 lives were lost on the island. Now the brilliantly green tropical foliage is creeping back over the ash heaps to hide the evidence of this desolation.

Grenada, southernmost of the three islands, is the most beautiful and most charming, and at the same time, the best developed. It forms almost a true ellipse 20 miles long and 9 wide. Its port at St. George's cannot compare in usefulness with that of St. Lucia, but it is a perfect gem of a harbor on a small scale, with a narrow entrance and a small land-locked basin. From the basin's rim St. George's grows up a ridge and down the other side, its housetops, half hidden among the palms, forming gigantic stair-steps.



© National Geographic Society

HEADWORK AT ST. LUCIA: WINDWARD ISLANDS

It is customary in many of the islands of the West Indies for women, each carrying from 75 to 90 pounds of coal on her head at one time, to fill the bunkers of the vessels which stop at their ports.

GEOGRAPHIC NEWS BULLETIN

Published Weekly by

THE NATIONAL GEOGRAPHIC SOCIETY

(Founded in 1888 for the Increase and Diffusion of Geographic Knowledge)

General Headquarters, Washington, D. C.

The Bonin Islands, Which Are Near the Deepest Place in the Ocean

WHERE is the deepest known place in the ocean?

It used to be off the Kurile Islands, north of Japan. Recently a new "deepest spot" has been reported by the Japanese Navy to lie between the Bonin Islands and Japan. Officers record a depth of 9,435 meters, which is a little more than five miles. Mt. Everest, the highest mountain, is five and one-half miles high.

But the discovery of the deepest spot in the ocean throws the Bonin Islands into the limelight. The last time the world heard much about them was four years ago, when Japan declared them to be part of her mainland. Actually they are 500 miles southeast of the principal islands composing Japan.

"Bonin" is a distinct misnomer for the little islands. Until the World War brought additions they were Japan's farthest extension toward the heart of the Pacific Ocean. "Bonin" means "without inhabitants." As a matter of fact, the 20 islets of the group now support a population of nearly 5,000. But "Bonin" now is only a western term. To the Japanese the islands are Ogasawara Jima, which is the family name of the first Japanese known to have viewed them. He was driven to the islands by a storm.

Where Man Could Have Lived Without Work

The Ogasawaras long remained without inhabitants. Like most lands of volcanic origin, they have exceedingly fertile soil. Because of warm currents their climate is in effect tropical, although they are just north of the Tropic of Cancer. Man could have existed on them without raising his hand in work. Wild beans and a profusion of edible mushrooms grew in the valleys, and wild pineapples and other fruits on the hillsides. Palms and tree-ferns furnished shade and greenery. And in other ways the islands were like a Garden of Eden when they were explored by the crew of an American whaler in 1823. There were no four-footed animals and only a few harmless reptiles. The birds, unmolested by any living thing, were entirely without fear of man. They could be caught by hand.

At the present time the islands produce all the Japanese cereals and many vegetables and fruits. The Bonin Islands are stocked with the common domestic animals. There also are wild goats, sheep, pigs and even dogs and cats, descendants of animals left by the first settlers. Of course the production from the islands amounts to little. Those large enough for development have a total area of only about 30 square miles.

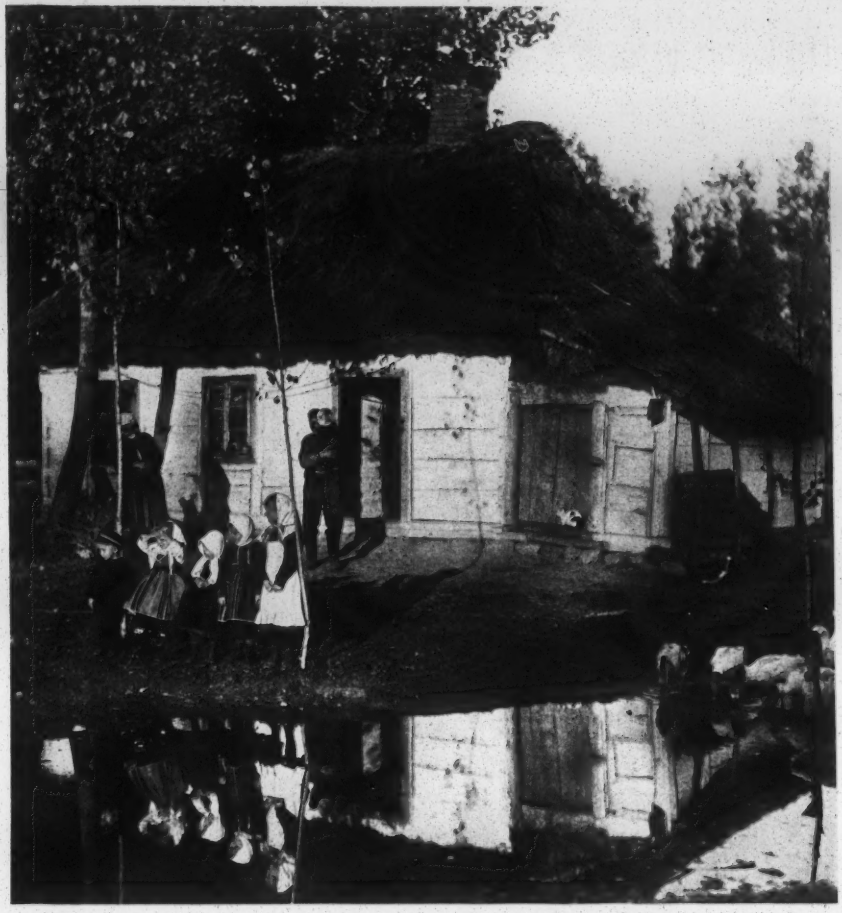
Discovered by a Spaniard, Claimed by Britain

Although they are closer to Japan than to any other nation, the Ogasawaras, or Bonin Islands, came near not being a Japanese territory. There is nothing to show that the Japanese knew of their existence before Prince Sadayari Ogasawara was driven to their shores about the end of the sixteenth century. Yet the Spanish explorer, Villalobos, first sighted them in 1543. The Ogasawara family made the islands a part of their feudal land holdings, but they did not settle them. When Japan drew more securely into its shell in 1635 by forbidding its subjects to construct seagoing vessels, all touch with the islands was lost for nearly a hundred years. They were not heard of again from 1728 to 1861. Abel Tasman, Dutch explorer, surveyed some of the islands early in the seventeenth century. American

All of Brest-Litovsk history, however, records no such high moment as it experienced late in 1917. The future looked black for the Allies. Russia, which had been holding Germany on the east, had collapsed under the pressure of war. Kerensky, the new Russian ruler who still stood by the Allies, was soon displaced by the Soviet régime. Germany had driven deep into Russian territory. With this setting the last act of the Russian tragedy took place in Brest-Litovsk. The fortress city had degenerated into a captured war camp and nothing more.

At the headquarters of Prince Leopold of Bavaria, Soviet representatives signed a separate peace with Germany. This treaty put the entire burden of carrying on the war on England, France, the United States, Italy and their Allies.

Bulletin No. 4, January 10, 1927.



© National Geographic Society

A PEASANT HOUSEHOLD IN POLAND

It was the products from farmers such as this one which made Brest-Litovsk once an important trading center. In those days Brest-Litovsk and practically all of Poland were under the rule of Russia.

whalers explored them in 1823 and 1824. In 1827 a British Admiral claimed the islands for his country.

The Ogasawaras received their first settlers in 1830. They consisted of a few British subjects from Hawaii who seem to have led the expedition, a few Americans and Portuguese and a handful of Polynesians. They considered themselves a British colony. As late as 1875 these settlers lived on the islands without any government or organization. There were no schools. Trading with the whalers, who by that time frequented the waters, was the chief occupation. In 1861 Great Britain renounced all claims to the islands in favor of Japan. That same year an unsuccessful effort was made to plant a Japanese colony. Later efforts prospered and the population now is almost entirely Japanese.

Commodore Perry Visited the Islands on Memorable Trip

The only good harbor in the Ogasawaras is the Port Lloyd of the whalers, the Oho Minato of the Japanese. Commodore Perry, who visited the Ogasawaras on his memorable trip to Japan in 1853, first called attention to the fact that this port is in a former volcanic crater. He recommended that the United States establish a coaling station there. Most maps label the island on which Oho Minato is situated, "Peel," but its Japanese name is Chichi Jima.

Bulletin No. 5, January 10, 1927.

© National Geographic Society

SHIPPING FLAX FROM RIGA, LATVIA

The territory east of the Baltic Sea was before the war one of the chief sources for the world's supply of flax. Much flax from this region went to Ireland and to Belgium where it was woven into linen (see Bulletin No. 4).